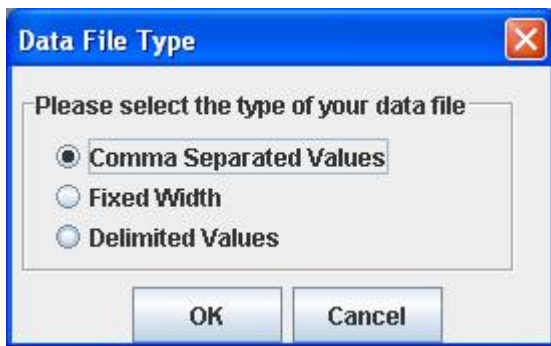


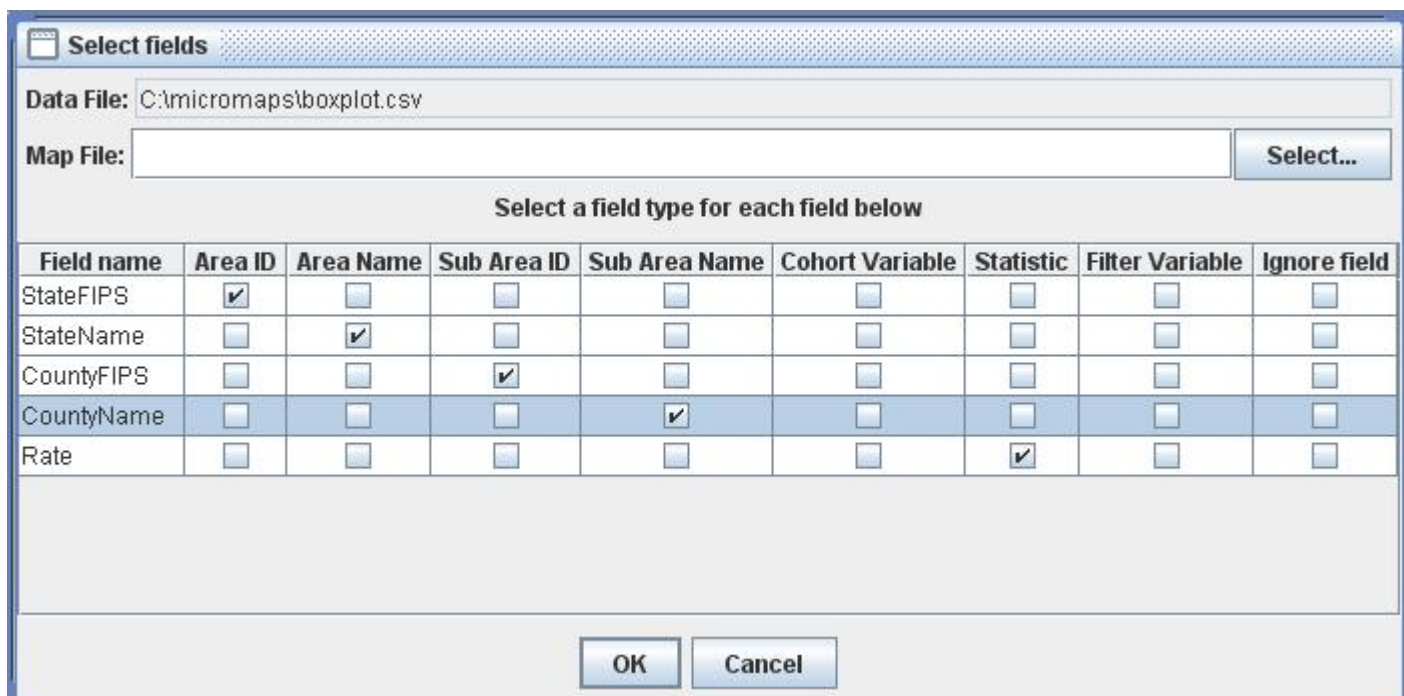
Tutorial E – Box-Plot With a Shape File

Note: Generally, it is not advisable to use a high-detail shapefile with PC Micromaps such as US by county, as the map may not appear properly. However, with a smaller dataset such as data for only a few states, you may want to use a shapefile which only contains those states.

1. Start **Micromaps**.
2. Go to **File > New Session**



3. Select **Comma Separated Values** (if it is not selected already) and click **OK**.
4. Select the data file (the file browser will look initially in the same directory as the Micromaps.exe file): **boxplot.csv** and click **Open**.
5. Then the **Select Fields** Screen will appear. Make the selections as shown below (note that the StateFIPS field is set to be the "Area ID" and CountyFIPS field is the "Sub Area ID")

A dialog box titled "Select fields" with a close button (X) in the top left corner. It has two text input fields: "Data File:" with the path "C:\micromaps\boxplot.csv" and "Map File:" which is empty. To the right of the "Map File:" field is a "Select..." button. Below these fields is a section titled "Select a field type for each field below" containing a table with 9 columns: "Field name", "Area ID", "Area Name", "Sub Area ID", "Sub Area Name", "Cohort Variable", "Statistic", "Filter Variable", and "Ignore field". The table has 5 rows of data. At the bottom are "OK" and "Cancel" buttons.

Field name	Area ID	Area Name	Sub Area ID	Sub Area Name	Cohort Variable	Statistic	Filter Variable	Ignore field
StateFIPS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
StateName	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CountyFIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CountyName	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Since this data only has one record per county, the Cohort Variable column is blank.

7. Click on the **Select** button next to the **Map File** textbox and select **six_states.shp**.

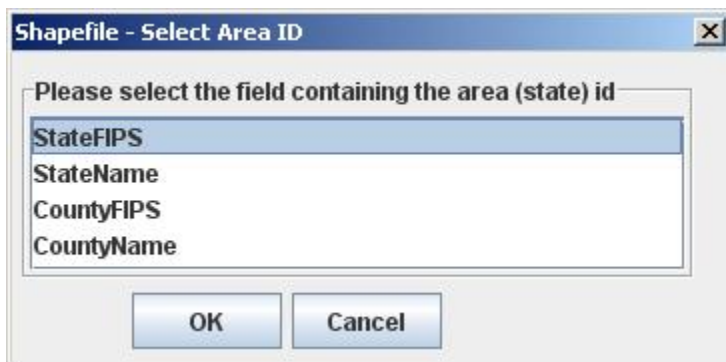
8. Click **OK** on the **Select Fields** window. You should see a prompt:



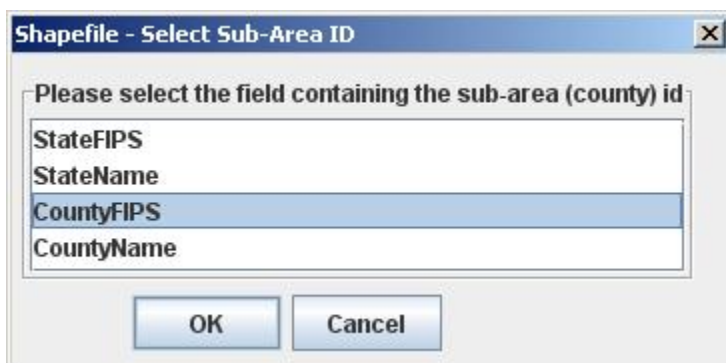
9. Click **"Yes"**.

Note: it is also possible to use the box-plot feature with shapefiles that do not contain sub-area (county) coordinates.

10. Select the field in the shapefile that corresponds to the Area ID. In this example, it is the **StateFIPS** field. Click **OK**.



11. Select the field in the shapefile that corresponds to the Sub-Area ID. In this example, it is the **CountyFIPS** field. Click **OK**.



12. You should have a screen that looks like this:

Graph 2

Data Selection | **Graph Options**

Data file: C:\micromaps\boxplot.csv

Map file: C:\micromaps\six_states.shp **Browse...**

Column 1

- New column
- Duplicate column
- Remove column
- Rename column
- Move column up
- Move column down

Graph type: [dropdown]

☐ Lock cohort variables between fields

Only show areas where:

Variable	Selection	Remove

Add Condition

13. Select **Box Plots** from the **Graph Type** List Box.

14. **Rate** will show in the **Statistic** List Box.

15. The screen should look like this:

Graph 2

Data Selection | **Graph Options**

Data file: C:\micromaps\boxplot.csv

Map file: C:\micromaps\six_states.shp **Browse...**

Column 1

New column
Duplicate column
Remove column
Rename column
Move column up
Move column down

Graph type: **Box Plots**

☐ Lock cohort variables between fields

Statistic | **Rate**

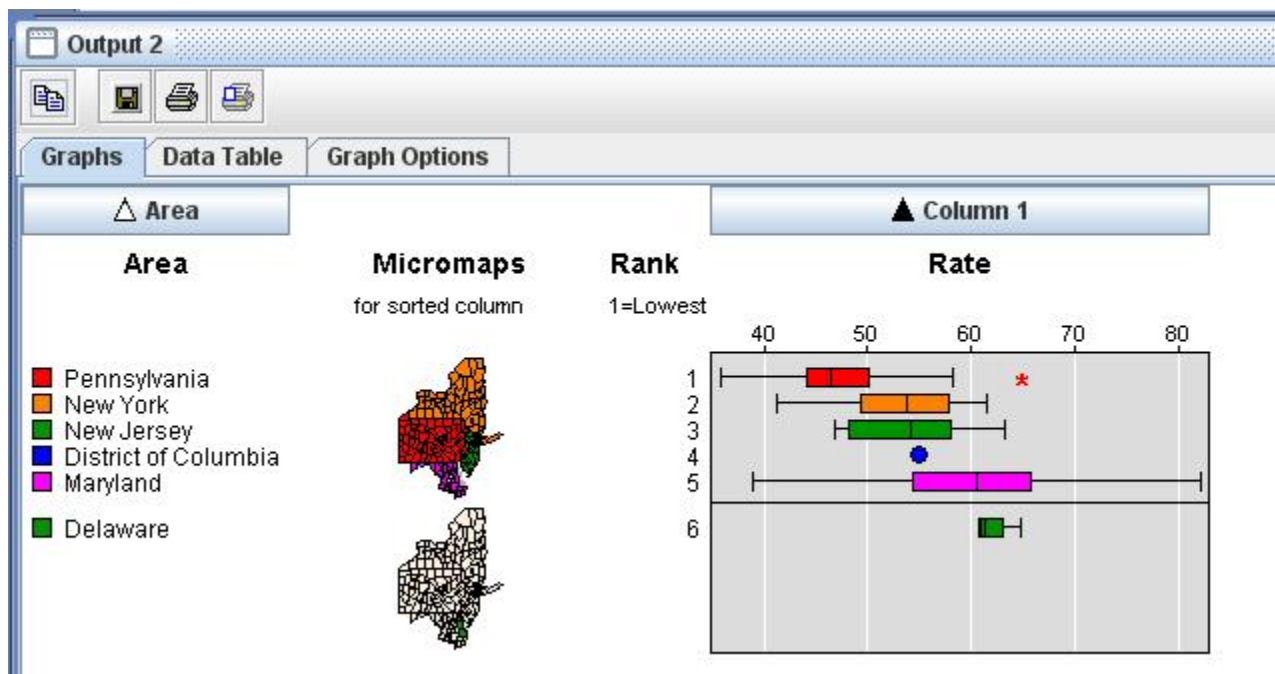
Only show areas where:

Variable	Selection	Remove

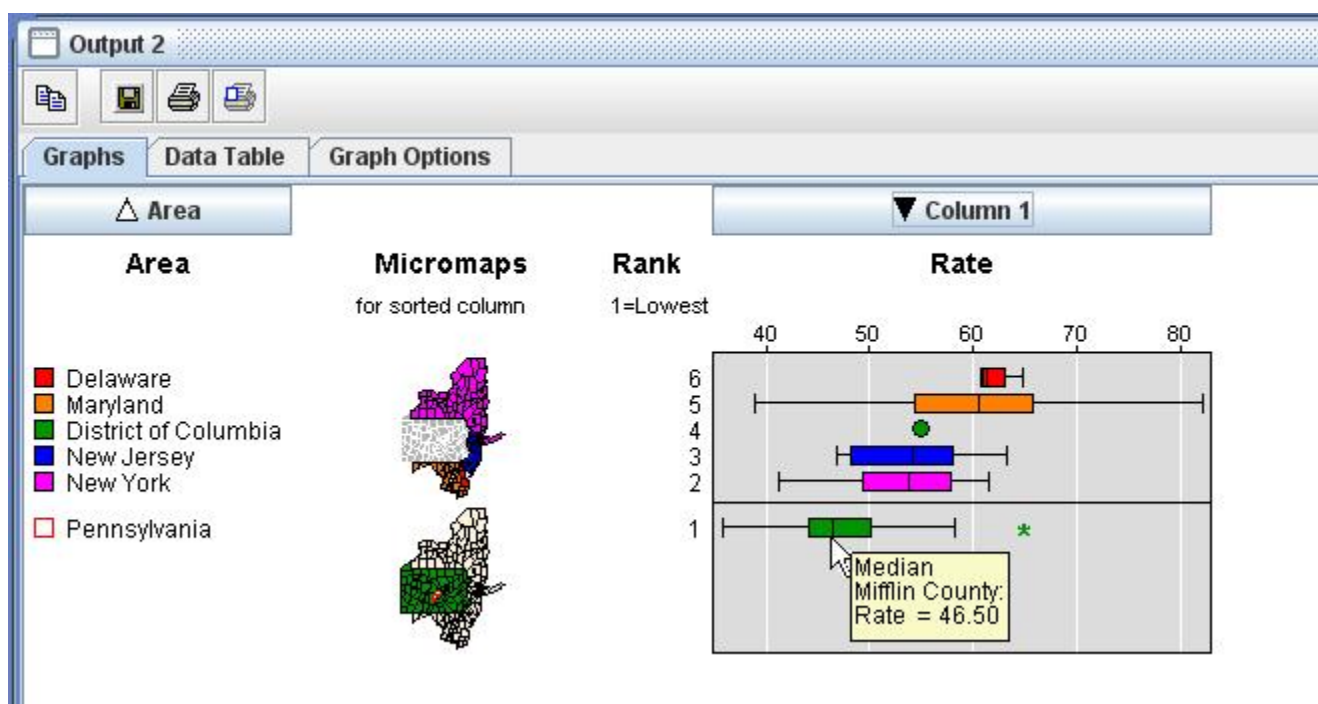
Add Condition

16. Then Click the **Lightning Bolt/Execute** Button.

17. Your result should look like this (see next page):



18. You can sort the box-plots by the median value or by the Area name by clicking on the header. By placing the mouse over the various parts of the box-plot you can see what county they represent.



19. You can also see the data for all of the counties/states in the **Data Table**.

Output 2	
	
	
Graphs	Data Table
Graph Options	
Area	Rate
Kent County, Delaware	60.70
New Castle County, Delaware	61.30
Sussex County, Delaware	64.80
Allegany County, Maryland	55.70
Anne Arundel County, Maryland	66.40
Baltimore County, Maryland	60.20
Calvert County, Maryland	63.60
Caroline County, Maryland	64.90
Carroll County, Maryland	51.40
Cecil County, Maryland	65.30
Charles County, Maryland	67.90
Dorchester County, Maryland	68.30
Frederick County, Maryland	54.20
Garrett County, Maryland	40.80
Harford County, Maryland	59.40
Howard County, Maryland	47.60
Kent County, Maryland	59.30
Montgomery County, Maryland	38.80
Prince Georges County, Maryland	57.20
Queen Annes County, Maryland	60.70
St. Marys County, Maryland	61.60
Somerset County, Maryland	82.10
Talbot County, Maryland	50.30
Washington County, Maryland	54.70
Wicomico County, Maryland	69.80
Worcester County, Maryland	64.70
Baltimore City, Maryland	74.80
District of Columbia, District of Columbia	55.00
Atlantic County, New Jersey	58.10
Bergen County, New Jersey	48.00
Burlington County, New Jersey	56.00
Camden County, New Jersey	60.10
Cape May County, New Jersey	58.30
Cumberland County, New Jersey	55.70

20. To save the session, go to the **File Menu – Save Session As** option.